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THE RELATIONSHIP OF CURRICULUM TO SCHOOL DISTRICT ORGANIZATION.

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THE CURRICULUM IS DEFINED BROADLY AS ALL THOSE EXPERIENCES WHICH STUDENTS ENCOUNTER THAT ARE UNDER THE AUSPICES OF THE SCHOOL DISTRICT. SCHOOL DISTRICTS SHOULD BE ORGANIZED INTO LARGE ENOUGH UNITS SO THAT IT IS POSSIBLE TO PROVIDE THE NECESSARY EXPERIENCES TO MEET THE NEEDS OF ALL STUDENTS. A GOOD CURRICULUM IS NEVER STATIC BUT IS ALWAYS IN A STATE OF CHANGE. THUS IT IS THE TASK OF THE CURRICULUM DIRECTOR TO CONTROL THIS CHANGE, ALWAYS BEING COGNIZANT OF OUR RAPIDLY CHANGING SOCIETY WITH ALL ITS SOCIETAL PRESSURES AND RESTRICTIONS. THE CURRICULUM DEVELOPMENT PROCESS MUST INCLUDE RECOGNITION OF THE IMPORTANCE OF OTHER RELATED GROUPS, AGENCIES, AND INDIVIDUALS TO EFFECTIVELY DEVELOP THE BEST CURRICULUM. THE SUPPORTING SERVICES OF PUPIL PERSONNEL, RESEARCH, AND DATA PROCESSING CAN ASSIST THE INSTRUCTIONAL PROGRAM IF PROPERLY UTILIZED. COMMUNICATIONS MUST BE KEPT OPEN AND OPERATE FREELY AT ALL LEVELS WITHIN THE PROFESSIONAL STRUCTURE AND ALSO WITH THE STUDENTS, THEIR PARENTS, AND VARIOUS GROUPS AND AGENCIES OUTSIDE THE SCHOOL DISTRICT. A MODEL FOR CURRICULUM DEVELOPMENT AND A BIBLIOGRAPHICAL REFERENCE SECTION ARE INCLUDED IN THIS DOCUMENT. (ES)

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THE RELATIONSHIP OF CURRICULUM TO SCHOOL DISTRICT ORGANIZATION

by

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FOREWORD

The impact of scientific, technological, social and economic change on the American way of life necessitate a re-examination of the educational system. These changes modify established needs and create new needs to be met by the public school system. Instructional programs and supporting services must be developed to meet these needs.

The primary purposes of school district organization are to make possible: (1) the desired quality or excellence of the programs and services; (2) the efficiency of the organization for providing the programs and services; and, (3) the economy of operation, or the returns received for the tax dollar invested in education.

The "needs" to be met by public education are translated into educational objectives, and a curriculum of programs, courses of study and activities are designed to make possible the achievement of the identified objectives. The educational structure has a direct relationship to the quality of these programs, and to the extent to which they are provided at an acceptable level of efficiency with economy of operation. Dr. Harold Turner was invited to assess the relationship which should exist between curriculum and school district organization. This paper represents his analysis of the problem, following consultation with the State Directors for the Great Plains Project and specialists in the field of the curriculum.

The value of this paper rests upon its utilization by those with advisory and/or decision making responsibilities about the educational structure in each state. It represents a beginning point for further study and evaluation, and for establishing criteria upon which guidelines can be developed for effective and constructive school district organization.

Respectfully submitted,

Ralph D. Purdy, Director
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January 19, 1968

THE RELATIONSHIP OF CURRICULUM TO SCHOOL DISTRICT ORGANIZATION

PART I

The Problem - Curriculum in Our Changing Society

The Setting

Today as never before in the history of education the word is change. We are living in the "hydrogen age". We are taking the first halting steps to outer space. Our children are growing up with television as a way of life; comfortable in the knowledge that man can survive in space; accepting "the pill" as a normal accoutrement--and the older generations look on in disbelief. In this day of cybernetics we can no longer afford the luxury of the Model T educational program when we need a Gemini model in wide orbit. Recently George B. Leonard and John Poppy - Look's West Coast Office, were quoted as saying:

> Education's job will be to help young children learn in one third of the time now spent on it, through computers and programs, such things as spelling, reading and figuring. They will also learn that such knowledge is tentative.
>
> The remaining years of childhood and adolescence will be devoted to exploration and to flexible, individualized learning activities, not just in traditional subjects but in field which do not even have a commonly accepted name today.
>
> By 2000, or before, "teaching" as it is now commonly accepted will be dead, and the job of an educator will be transformed into that of a "facilitator" - "one who creates a rich, responsive environment that will elicit the most learning and change from the student". There won't be any compulsory education, but educators will have to make their material relevant to students' needs "or they won't get any students." [12]

The population today not only has moved to the city, it is constantly moving from city to city. Fewer students spend their entire educational career in the same system. This fact, coupled with the necessity of acquiring a higher level of education today than was the situation before, causes serious complications. Each school district has a part in educating future workers for the entire country; each business and each metropolitan complex has a stake in what occurs in school districts throughout the land. Yet the local district remains responsible to its local patrons, not to the remainder of the nation. Hence, a dichotomy develops between the two.

The editors of Education U.S.A. recently states that within fifteen years approximately 80 percent of this country's population will live in some urban area of 500,000 or more.[11] We are constantly being told by many sources that there is increasing need for education throughout one's lifetime; that more leisure time will cause adults to seek different, more satisfying ways of using it, hence a need for some type of education; that students will continue to remain in a formal educational program longer; that the new technology will require more education than we have known in the past; that the population is regrouping with more elderly

living longer and more younger children, both groups having need of education. Shane[28] likens the importance of that which is presently taking place to the development of printing and to the Industrial Revolution. These few examples demonstrate the rapid change now confronting and the significance of education for the future.

The School in the Setting

When the curriculum specialist turns his attention to the task at hand, he finds wide variations of suggestions and great discrepancies in programs presently existing. Furthermore, he finds almost as many self styled experts willing to suggest curricular alterations as he finds critics objecting to current practice. He is aware of several "basics" as he faces this problem of change.

First, the cliche "changing the curriculum means changing people" gets at the very heart of curriculum development. Down through the years research has repeatedly demonstrated that those innovations, modifications and revisions which were lasting were those which were significant in the minds of people and were those which people became committed to maintain.

Second, it becomes more apparent that nothing less than the K-12 concept is acceptable today. It is quite likely that within the very near future the K-12 concept will be expanded in both directions to a preschool-adult concept. Research is now indicating a distinct need to work with children at a very early age. We are also realizing that adults continue to need some kind of educational experiences into their retirement period.

Third, the increasing knowledge available in all disciplines and the corresponding attempts to find ways to minister to these "shifting truths", have caused subject specialists great concern. As the content is reviewed and revised, more tends to be placed earlier in the curriculum. It is imperative that concepts, generalizations, understandings, etc., build on what was previously studied and move to other, more sophisticated, but directly related material, if the learning process at all levels is to be satisfactorily achieved. Such a change in emphasis demands highly qualified teachers, thoroughly competent in their disciplines and in techniques, to properly serve their students.

Fourth, one approach would be to state that the optimum curriculum is one which best meets the needs of the students within the district. Obviously this is akin to favoring the flag and motherhood; we are all for it, but each of us views the process somewhat differently. The means of attaining such a goal sometimes present difficult choices.

The curriculum offerings, i.e. the program of studies, should be sufficiently diversified to provide a broad choice of alternatives for each student. Traditionally small schools have been able to provide the minimum number of college preparation - type courses and very little else. In addition, lack of staff has caused many teachers to (1) teach an excessive number of varied courses requiring many separate preparations and/or (2) teach out of their field of specialization. Often such schools lack sufficient instructional materials or adequate facilities to properly conduct the few courses included.

Not only should every district provide opportunity for students to prepare for later matriculation in higher education, the instructional program should be continually improved upon so that the local graduate can successfully compete with other graduates from schools throughout the country. Every district should resist

the snob appeal of the college prep, curriculum however, offered exclusively, to the neglect of other equally important parts of a well balanced program of studies. While there is increasing interest in higher education on the part of the general public, thinking individuals realize that college is not designed for all. Many students, due to lack of native ability, the lack of desire to achieve in the academic framework, limited finances or with life goals outside the academic periphery, evidence little or no interest in continuing their formal education after the twelfth year. School should give thoughtful consideration to the fact that this large group does exist. Care should be taken to insure that students' needs for becoming active, productive self-respecting members of society are being met.

Regardless of the eventual thrust of the local district, the demands of today's increasingly complex, highly technical society leave little room for the high school dropout. Furthermore, in the desire to reach and maintain excellence, higher education, which finds more students demanding entrance than it has ever before found, gives short shrift to the low or slow achiever. No longer can the local district, particularly those small, rural ones educate specifically for life in the immediate community. Since the majority of rural students can be expected to spend their productive lives in some metropolitan area, it becomes imperative that their public schooling should recognize and relate to such a future. McLure says, "One out of 5 rural youth will find a livelihood in rural areas. The others will have to prepare for a living in an urban community. This situation places a dual responsibility in the rural school, to help those who will continue living in the rural areas and also to assist those who grow up in this environment, but transfer to urban communities."[22]

A variety of occupational programs seem desirable in this respect. Students need as a minimum those skills and backgrounds necessary to achieve a job-entry level of performance. Usually this is construed to include a level of achievement in the basic subjects commensurate with upper elementary school plus a grounding in some general area of specialization to enable the individual to become competitive on the labor market. For many years this has largely been confined to the area of business education. Recently the press of society has caused the inclusion of various occupational programs directed toward the service areas and sometimes toward specific occupations within the general umbrella of the trades. The prudent curriculum director will long hesitate to attempt to prepare students for a specific, narrow job category, however, recognizing the obvious weaknesses in such endeavors. Instead he will strive to provide a variety of experiences pointed towards broad occupations, thereby providing students a wider lattitude, choice and general saleability when first entering the labor market.

Another major concern of the balanced curriculum is that directed towards meeting the needs of the atypical student. Prevailing practice includes special education programs for students retarded or handicapped in some manner, either physically or mentally. In most instances such programs have been considerably more expensive to mount and operate than the regular program. Because of the costs involved little is done by local districts without outside aid and management. Some districts have turned special attention on the problems of the talented student and have made deliberate efforts to challenge those individuals in ways impossible in the regular program. As a rule, however, these "gifted" students receive less special attention than that paid the retarded group.

In response to these and other significant educational problems, today's professional must be better trained than ever before. It soon becomes evident that specialization has hit education even as it long ago hit industry. The line administrator cannot be expected to also be an instructional expert. The curriculum specialist, either the generalist or the subject specialist, must be called to deal with the technical problems involved in the curriculum and the accompanying instructional program.

The Curriculum

The curriculum has been defined broadly as all experiences which students encounter that are under the auspices of the school district. In a much narrower concept the curriculum is sometimes viewed as the course of study, that which is recommended to the teachers for their usage. Many laymen consider the curriculum the "stuff" of the instructional program, the subject matter content actually utilized by the teachers. Some think of the curriculum as the program of studies--that detailed list of offerings, both elective and required, which all students find available. As the term is used within this paper, it will include all of these but primarily should be construed to mean all those experiences for which the schools are responsible.

The best curriculum is never static, in fact it is constantly in a state of change. As the press of new knowledge moves into the various disciplines, the classroom teacher is confronted with increasingly complex questions of what to include and what to omit. One solution is to move towards the teaching of concepts, understandings and generalizations with less attention to any special, fixed group of facts. Such an approach gives the individual instructor considerably more maneuverability than when relying entirely upon the imparting of certain facts. Certainly if the Look statement can be accepted this solution must be carefully studied as a prime necessity of future survival..

Summary

The preceeding remarks have attempted to describe the situation presently existing in our society. They, further, have attempted to indicate some of the directions which a rapidly changing society seem to be thrusting education. This, then, becomes the "real world" for the curriculum director as he attempts to provide the most meaningful education possible for all students. The curriculum director, more than any other one individual within the district, must have this "big picture" clearly in focus as he continues to study the various bits and pieces of the curriculum.

With the implications of these societal pressures and restrictions in mind, let us now turn our attention to the process of curriculum development.

PART II

The Proposed Solution - Process of Curriculum Development

The Program Needed

As the individual district attempts to provide an adequate curriculum to meet the needs of its students today, what considerations must be given to the implementation process? How does the curriculum director or the director of instruction approach his task? Let us first examine some components of the program. Later we can consider the various individuals and services required to produce and maintain the desired program.

First, the process of curriculum development must be examined. Is there a method which ensures satisfactory progress, which gets at the basic issues involved? A wide variation in attacking such problems actually occurs from district to district as well as within individual districts. Taba[7] has outlined what she considers to be the necessary steps as: diagnosis of the needs, formulation of objectives, selection and organization of content, selection and organization of learning experiences and, finally, determining what to evaluate plus the ways and means of doing so.

Second, as the process is carried out, it is assumed that a constant quest for improvement is taking place. Obviously, if the proposed change does not result in some improvement, there is little or no justification in deviating from the existing pattern. Unless particular attention is paid to the need for and methods of research it will be quite difficult actually to determine growth. A systematic evaluation will keep the curriculum director informed of the progress being made and the resultant learning level.

Third, it is becoming increasingly evident that the clearly structured objective can become an important tool in curriculum development. Bloom's[3] work with the taxonomy of educational objectives has produced considerable insight into the improvement of these curriculum guideposts. Educational objectives, clearly stated in behavioral terms, tend to provide succinct directions toward statements of the thoughts, actions and/or feelings considered desirable for students. As these objectives can be translated into specific statements of those characteristics desired of students, it becomes more possible to evaluate adequately the progress of the student and the success of the instructional program. Hence as specific objectives are recognized, it becomes possible to design and prepare educational activities and learning experiences which can achieve these objectives.

Fourth, the most important single factor related to the process of curriculum development centers around that which is loosely regarded as inservice. Before an innovation whether major or minor, can be mounted, consideration of the proposed change must carefully be given by those staff members who will be involved. If a general concensus is lacking or cannot be developed, the change will likely sail on troubled waters. As a new program is implemented, other staff members become involved, new persons are employed to replace departing members and the new personnel must be oriented to the program. Whether the initiation or maintenance factor is primary, both are essential and both fall under the province of inservice. In addition, attention must be given to the problems involved in working in groups. Since both individual and group involvement is extremely important, provision is

needed to insure the best possible rapport between and within the various groups involved. Special attention must be given to free individuals from whatever rigidity they may have which might tend to negate the effectiveness of the curriculum development project being attempted. This also comes under the aegis of the inservice mantel.

As we examine the organization required to effectively deal with the curriculum and the resulting instructional program, the following model may help the reader follow the discussion through the various spiralling sequences.

Organization	Staff & Personnel	Services Data Processing, etc.	Finance	Research
Attendance Center	Minimum	Limited	Limited	From Administrative District	Some
Administrative District	Central Staff	More & Better Trained	Support Attendance Centers	District-wide Base	Program-wide
Area Level	Added Specialists	More Experts	Interrelated Network with Districts	More Wealth	Diversified more Sophisticated
State	Added Services	Added Experts	Interrelated Network with areas & U.S. Office	Deversified Taxing	Coordinate & Disseminate
Multi-State	Cooperative use of Specialists	From Cooperating States	Interrelated Network of States & U.S. Office	Compacts	Inter/ Intro-Regional Problems
Federal	Specialists	Specialists	Coordinating	Categorical	Support disseminate

?

Model of Organizational Structure Needed
For Adequate Curriculum Development

The Organization Needed for Effective Curriculum Development

Throughout the development of American public education, consideration has been paid to the curriculum. From time to time this attention has resulted in some major breakthrough and, as a result, progress has occurred in halting, jerky stages. For example, the academy replaced the Latin Grammar School and was in time replaced by the present day high school. The various commissions and committees at the turn of the present century helped alter the direction of the curriculum as they developed the Seven Cardinal Principles and the Carnegie Unit.

Today we are faced with major curriculum revision arriving in the form of prepared packages. Mathematics and science in particular have moved very emphatically in this direction. Other areas such as foreign language, English and the social sciences, have followed suit, though less rapidly. The impetus for preparing these curriculum packages, in the main, has come from outside the regularly established groups who in the past have usually concerned themselves with such matters. Instead scholars and workers from within the discipline itself have provided the leadership and also most of the know-how.

At the same time big business has recognized the vigor of the educational bank account, swelled with Federal funds, and has quickly moved to provide new instructional supplies and equipment - the "hardware" and the "software" needed to satisfactorily function today.[29] All indicators point toward a greatly expanded utilization of such material in the future. While this means more money will be necessary, it also indicates that an improved professional expertise must be developed. The classroom teacher today must have much more knowledge and skill than was necessary merely one generation ago. The teacher of the future will find that he must be even more knowledgeable to remain adequately prepared.

The Structure of Public Education

A brief examination of the various levels within the organizational structure seems appropriate at this time. At each level curriculum problems are confronted in a variety of ways by the various individuals and groups, both lay and professional. As indicated by the table on page 6, a spiraling effect can be traced through the various levels.

Attendance Center

A carefully developed plan should be formulated by those working at the "grass roots" of the educational structure, the attendance center. It is at this point that the plan eventually selected must actually be implemented. Several guidelines might be worth considering here to insure maximum performance and cooperation among the various individuals and groups.

First, provision should be made to establish a curriculum policy making body for the attendance center, a curriculum council. Rotating membership would include someone from the major groups or areas of the instructional program. The council should be concerned first with curricular problems primarily affecting the center, and second with curricular problems involving the district. The council should be concerned with establishing open communication between each classroom teacher and the administrative district curriculum office. It should provide an adequate forum for individual teachers interested in innovating or merely questioning existing practice.

Second, the individual staff members must be adequately prepared. In today's market this calls for advanced graduate work for administrators and work beyond the bachelor's degree for almost every member of the teaching staff. As the search for better staff utilization continues, it is quite possible that the "paraprofessional", advocated by Trump and his associates,[8] will prove a major break-through to provide the necessary additional manpower, though with limited training. The combination of increased demand for personnel plus the need for constantly expanding professional expertise has placed a great strain upon education today.

Third, not only must staff members be adequately trained, they must also be assigned to teach in the areas of their major interest. For the secondary teacher this means a limited number of preparations within his major field. For the upper elementary teacher this is coming to mean much the same. Because of the increased demands on the teacher by the various disciplines today, the rapidly increasing knowledge available, more use of electronic aids, etc., it is almost an impossibility for the teacher at approximately grade four and above to remain sufficiently "expert" in all disciplines.

It is crucial to the educational future of students that their teachers, during these earlier years, thoroughly understand the intricacies of the discipline taught. Anything less provides an inadequate instructional basis for future study and tends to place the student at a definite disadvantage during his subsequent educational endeavors. The profession is now aware of this emerging need and teacher education programs are being revised accordingly. The primary teacher will remain in a situation more nearly resembling the typical self-contained classroom and will be expected to handle most if not all subjects as in the past. The intermediate teacher, however, is likely to find herself in some sort of departmentalized arrangement. Inasmuch as she goes beyond teaching the "educational tools" and introduces the student to the disciplines, the intermediate teacher must have a clear understanding of the discipline and its special method. Such a competence can only be obtained by immersion into the discipline itself. It becomes readily apparent that such in-depth knowledge will require the teacher to limit the scope of her study. Hence, the teacher will need something akin to a subject major in one or two areas most appealing to her. Through careful staff selection and assignment, all subjects can be covered with teachers well prepared to introduce students to the various disciplines.

Fourth, there must be a constant educational ferment taking place at the attendance center. It is extremely important that inter-play or inter-action takes place among the various members of the staff. The best curriculum will be found where such inter-action is occurring and where a careful reevaluation of the existing curriculum is also occurring.

Fifth, there should be a continuous attempt to provide for more effective individualized instruction. Recently the profession has come to recognize the importance of individualizing or humanizing the curriculum in ways heretofor not thought possible or necessary. Modern technology has now provided education with the means to accomplish such individualization. Improved curriculum seldom occurs without supporting supplies and materials. Teachers must have available these necessary items. Individualized instruction requires more than schools have historically provided.

Sixth, at the attendance center it is very important that all teachers have the opportunity to participate in the various stages of the curriculum development process. Increasingly classroom teachers are insisting upon this involvement as a

basic working condition. Furthermore, such participation cannot be relegated to after hours as has often been done in the past. Administrators must provide time within the normal working schedule to teachers somehow to enable this participation to occur.

Seventh, it is imperative that the teachers and administration at this level have sufficient outside assistance to carry out their curriculum plans in the best possible fashion. This assistance should include a variety of experts, skilled in their specialty and also in working with both students and adults. Such expertise should be available at the pleasure of the building administrator to assist in providing a model instructional program.[22] The attendance center, then, becomes one of the most crucial components of the curriculum development team. If it fails to function adequately, the total operation will be weakened proportionately. Adequately prepared staff, properly placed, with sufficient time to function and supported by the necessary instructional supplies, materials and professional expertise are a must to provide the best curriculum.

Administrative District

The individual attendance centers representing the various portions of a community, and operating under a single board of education, may be identified as the administrative district. The district should contain sufficient student population to provide the various supporting staff members necessary for a sound, balanced curriculum coupled with a commensurate instructional program. Kreitlow found that the reorganized district "attracts a higher level of teacher who has a higher motivation for self improvement. Also after attracting this higher level teacher, the reorganized community provides the leadership for self improvement to a greater extent than the non-reorganized community."[19] In order to provide the best possible curriculum for the district as a whole, it is important that sufficient central staff be available to provide necessary leadership and expertise. Even if the various attendance centers had good curriculum development procedures, it would not necessarily follow that the total district program could be acceptable without the assistance of central office personnel.

Leadership within each of the subject disciplines should be provided by an instructional supervisor, highly skilled both in method and in content. This individual, operating from a staff position rather than line, should be able to coordinate the endeavors of the various staff members representing that discipline. Further, he should be able to bring the latest research findings, complete with implications for his district, to the attention of the teaching staff. He should be sufficiently grounded in good research practice to be able to provide the necessary expertise to assist those teachers within his discipline.

There is also need for an administrative district curriculum council. This body, made up of representatives from the various disciplines and attendance centers, as well as central district staff, should serve as the policy making group for the district curriculum program. At this level interaction between individuals from throughout the district can take place; ideas originating at the classroom level can be considered and disseminated; curriculum decisions affecting the entire district can be made.

In addition to the instructional supervisors, the central staff should include a variety of supporting services necessary to the success of the instructional program. As these special services are being examined in depth by other consultants, only brief mention will be made there. It should suffice to say that these services are extremely important to the total curriculum.

The personnel operation, under the direction of an assistant superintendent, should recognize that one of its basic purposes for existance is to supply the best staff possible throughout the district. In the competitive market today this usually means that most of the larger administrative districts must cover wide sections of the country in their recruitment endeavors. Staff members so selected, however, bring to the district a wide background representing all sections of the country and the district is stronger for having them.

Pupil personnel services are necessary to the proper functioning of instruction. Again the reason for being is to provide basic support for the instructional program of the administrative district. Various staff positions include nurses, physicians, psychologists, dental hygienists, social workers, speech correctionists, guidance counselors and attendance counselors. As some of the operation becomes more automated, technicians are being added and will continue to be added in the near future.

The function of research in the past has been quite limited within the administrative district. In fact, this has been one of the weakest links in the entire educational chain. Today however, there are more funds going into education research than ever before and the level of research is rising appreciably. As educational research becomes more sophisticated, and as more use is made of the computer, greater advances will no doubt be possible in the instructional program. Through the use of the electronic aids now available to the district the detailed pulse of the curriculum can be taken as often as necessary to determine the success or failure of any given piece of the instructional program. The computer is also emerging as an important teaching tool for the classroom.

One of the basic functions falling to the administrative district is that of inservice education. As new curriculum programs are mounted inservice programs are necessary to "tool up" the staff to handle the changes. As the primary curriculum thrust is maintained, and while new staff members replace original members who have departed, an inservice program must be provided to maintain the earlier level of performance. Inservice becomes the vehicle to assure continuity of curriculum and level of competence of instruction.

The view is held by many educators today that the administrative district with the strong instructional program is that district vitally concerned with a far-flung inservice program. New teachers come from the teacher training institutions, in many instances with minimum preparation. They need much assistance within the district to ensure their professional development. Teachers who are more experienced also need assistance, but of a slightly different type. The content has been changing so rapidly within the disciplines that it has become almost impossible for an individual to stay current without devoting full time to the task, something which the classroom teacher obviously cannot do. The district must recognize this danger and provide adequate inservice opportunities, implemented by the instructional supervisors. In addition, as new curriculum programs are designed and as innovations are tested, the staff directly involved must be thoroughly conversant with the changes and prepared to modify old ways to accommodate to the new. Those staff members not directly involved must also be advised of the changes taking place lest they become apprehensive and morale drop. All these require special types of inservice which become the responsibility of the district.

In summary, the central staff of the administrative district plays an important leadership role in providing for, and then in maintaining, a satisfactory curriculum program. Curriculum development cannot take place without the active

cooperation of the teaching staff; neither can it achieve outstanding results without the expert leadership of the central staff, including the curriculum director and the instructional supervisors. Various support services are vital to the success of the curriculum, including those provided by the offices of personnel, pupil personnel, research and data processing. A district wide curriculum council should be the vehicle utilized for overall direction of the curriculum development process. Finally, throughout the district a continuous inservice program must be mounted.

Area Level

The body, here identified as the area, is a recent addition to the educational scene and actually is still in the formative stages. It operates somewhere between the district and the state level. It thus replaces the county organization, assumes some of the former role of the state and fills a void in the present educational structure with a variety of services heretofore not available. It can provide program and service impossible to maintain by the administrative district due to limited members involved or to limited funds available or both. A representative elective board of education makes it more responsible to the people it serves than can the state agency.[23]

The area office should be staffed with top notch subject matter specialists, available on call, to assist local districts throughout the area. Expensive expertise impossible to employ within a single district can be retained at this level and can be used to serve all the districts as needed. These staff members could bring to the local scene the latest thinking from throughout the country on any given aspect of the curriculum. They would be competent to advise on trends to be considered locally, pitfalls to be considered and the best ways of preparing research designs for local and area implementation. They could provide the leadership to capitalize upon the combined strengths of the various districts in the effort to strengthen various components of the curriculum and the instructional program.[22]

One recent service for education which is emerging because of the current technological revolution is in the area of data processing. The various pieces of highly sophisticated electronic equipment, particularly computers, now available make much possible that was previously impossible. For example, complete item analysis of a standardized testing program can be provided to districts as well as to the individual teachers involved. Where such information is employed in a positive way to strengthen the total curriculum, a great service can be realized. The cost of the larger, more efficient pieces of electronic equipment is prohibitive for small districts and even questionable for many larger districts. The area level, however, can profitably, and efficiently, make use of this equipment and can provide many needed services to the local districts which otherwise would not occur.[10]

The combination of expert staff plus adequate facilities and equipment presents a tremendous opportunity for much needed educational research. The area itself would represent a goodly population. The leadership provided by the area staff could produce some highly significant findings for the curriculum which under presently existing arrangements are not available. Such large scale, in-depth research could produce results which could more than justify the expense involved, not to mention the various other services thus made possible as by-products.

At the same time, through the cooperation of the various independent districts, larger scale curriculum development could serve as the necessary stimulant to such a massive endeavor. A wide variety of high quality curriculum publications could be produced and distributed at the area level. Such activity would minimize unnecessary expense through duplication of effort and publications and through the use of more efficient production methods. It would also provide high quality consultant service to prepare the materials while still involving a maximum number of individuals at the local classroom level.

The area staff occupies a unique position in respect to inservice education. Because many districts can become involved, a more efficient package of inservice programs can be mounted. Some relatively expensive and highly specialized programs which could never be provided by individual districts, are possible through such a joint effort. Sufficient variety is possible within the area to service the needs of most if not all staff members from the cooperating districts. Expensive, outside consultants can be provided on an area basis who would be unobtainable by individual district faculties. As new curriculum publications are produced and made available to individual teachers, adequate inservice programs can be initiated at the proper time to insure maximum acceptance and usage of the materials.

A variety of contractual services can be provided on an area basis at a minimum cost to the individual district. Those specialized services are often very expensive and difficult for the individual district to maintain. Such items might include a computer-involved information retrieval system, an extensive library of video tapes, a complete audio visual service and the services of some specialized personnel such as psychiatrists, etc. Uslan recently stated:

> Regionalism is no longer a question of stop or go, but rather how shall it organize. Purposes need to be clarified and a realistic fiscal plan must be developed. Regionalism is also a natural vehicle for reconciling a systems approach with all of education... Increasing educational expenses are outdistancing taxing powers of local governments. Alliances of federal, state, local, and industrial educational organizations, under the organizational shelter of educational regionalism could result in the pooling of large sums of money and a reduction in the duplication of effort. Properly developed, neither local autonomy nor individual educational opportunity need be limited. (p. 64)

In summary, the area level is emerging as a replacement for the ofttimes outdated county organization. It better provides some services previously obtained from the state and some previously unavailable. It can provide efficient use of data processing equipment, too expensive for individual districts to obtain, and it can provide highly qualified staff to assist the local districts in curriculum development, improvement of the instructional program, more sophisticated research activities and improved inservice programs. A functioning area staff will greatly strengthen the instructional offerings of the various participating districts.

State Level

Legally the state is the responsible agent for the educational program operating within its borders. As such it will have a continuing interest in the activities taking place at the district and the area levels, and will no doubt continue to circumscribe such activities according to what it considers minimal acceptable standards. Inasmuch as the costs of education are continuing to

increase each year, the state finds itself hard put to provide adequate financial assistance to all the local districts. This is especially true with those districts unable to raise the minimum funding locally. Experience has shown that whenever the state is unable to accomplish that which the public generally feels must be done, the Federal government will provide that assistance. Not only must the state renew its efforts for providing financial support at this time, it must also look carefully at the curriculum and instructional program throughout the state.

Staff at the state level should include curriculum and instructional specialists who are intimately involved with, and aware of, activity in the U. S. Office of Education and the various state departments of education on the one hand, and the activities and concerns of the various areas within their own borders on the other hand. It should be available for advisement to districts and areas within the state upon a wide variety of matters including sound curriculum, promising trends, various instructional concerns, as well as sources of potential research and innovation findings. In addition, it should provide leadership to encourage the districts to strive for a higher level of instruction.

The electronis data processing capability available at the state level should complement and supplement that existing in the area offices. Such a network throughout the state would make possible massive research and development never before known. It would enable the state to identify and help shore up instruction in the weaker districts more readily and more effectively. It could better give assistance to local districts attempting to improve their instructional effort. It could also provide research leadership on a scale never before attempted, the results of which would be fed back to the many local districts for immediate consideration. Throughout all its endeavors it could and should emphasize quality programs.

In summary, the state is given the responsibility for education within its borders. In carrying out this responsibility it must continue to keep pace with the new potential now available through modern technology. It must supply advice, assistance where requested and direct leadership to the districts and areas in the continued effort to upgrade the curriculum and the instructional program. Computers and expert staff can combine to produce large scale educational research of great significance to the local districts. A strong push toward quality education must be continuously made at the state level.

Multi-state Level

The changes recently taking place in education and the increasing complexity of the entire operation seem to be forcing us to consider a new grouping. Several states with like problems and interests may be forced to band together to assist each other in the solving of mutual problems. Specialists supplied by, and representing the participating, state groups can function, sometimes as a standing committee, sometimes on an ad hoc basis.

Such a multi-state involvement could result in several benefits. Joint assistance would result in a stronger capability than would be possible on an individual basis. Some technical capabilities are prohibitive, cost-wise, to most states at the present. A cooperative, innovative effort could provide the direction for others to follow and this could result in an improved curriculum and instruction.

Provisions could be made at this level to provide a massive research capability from all standpoints - talent, materials, equipment and subject populations. At the same time the existing structure, from district level up, could be utilized to

communicate and disseminate findings so that existing program modification would occur without the traditional time lag.

In summary, the complexity of education today and the new developments in technology make practical a new effort - the multi-state operation. The pooling of available talent can provide greater strides in research, innovations and an improved instructional program.

Federal Level

From the early days of this country there has always been some federal assistance provided to education. Currently this assistance has increased at a rapid rate and seems likely to maintain its flow. Local districts find themselves on the horns of a huge dilemma today. They desperately need financial assistance as they attempt to keep a balanced budget. Rapidly increasing costs and an unrealistic method of financing make this extremely difficult to accomplish. The new federal funds become even more attractive under such circumstances. Suddenly the method of categorical aid used to distribute much federal money throws the local district budget out of balance and forces major changes within the district.

This method of financial assistance will continue to guide the curriculum and result in a considerably modified instructional program, more acceptable at the federal level, if the local states do not provide sufficient financing. Recent discussion centered on national assessment may be cited as an example. The premise of national assessment is to identify those districts, areas, states, etc. which do not have minimum instructional programs. Once identified, federal assistance can be provided to bring the substandard units up to an acceptable standard. In the same manner that a chain is considered only as strong as its weakest link, the security of the country is considered to be weakened by permitting substandard educational programs to continue.

There are many services which can best be provided by the U. S. Office of Education. Much top quality leadership can be made available to all states. Better coordination and communication can be provided through a central clearing house rather than merely leaving everything to chance contact. Recent mergers of large industries, enabling more efficient production of both hardware and software, might be either an angel or a devil. Undoubtedly the individual teachers will be able to do certain things better with the materials than without them. The decision as to which materials should or should not be utilized for a given group at a given time and place might rest with industry rather than the professional educator. Theoretically, no one desires this to happen; practically it could and perhaps with a debilitating effect. The concern of the U. S. Office of Education might prevent such an occurrence, whereas an individual district would find itself powerless to intercede.

In summary, the federal level can be considered by the local district as either friend or foe depending upon the circumstances. It can provide expert leadership within the field of education. It is providing more financing than ever before, largely in the form of categorical aid, which often tends to cause curriculum development in some preconceived direction. It is sufficiently powerful to protect individual districts from outside pressures which develop from time to time. Perhaps stronger units at the state and multi-state levels would tend to limit the undesirable activities at this level.

Limitations and Restrictions to be Considered

Sophisticated, well documented research in terms of desirable sizes of districts, students and staff necessary for optimum curriculum development are quite sparse. Most of the literature available today refers either to individual bias and intuition or to something based on administrative convenience. Much more research is needed in this area. However, the following remarks are presented as comprising the best judgment of the author, supported by personal experience and a considerable review of the literature.

Minimums Necessary to Support the Least Acceptable Curriculum

The literature generally agrees that the minimum needed to provide a reasonable instructional program would include one teacher per grade in the elementary school or at least one hundred students in the graduating class of the secondary school. Jackson[18] studies high schools in eleven southern states and reached several conclusions. A major portion of curricular program enrichment, in the form of additional courses and subject areas, occurred with the enrollment range of 500 - 1500 pupils.

Recommended enrollment ranges were: in grades 7 - 12, 950 - 1300 pupils; in grades 8 - 12, 810 - 1150 pupils; in grades 9 - 12, 890 - 1250 pupils; in grades 10 - 12, 700 - 950 pupils.

Curricular programs generally continued to broaden in scope as school size increased -- at least to enrollments of 2,000 pupils. (p. 31, 32)

As an outcome of a recent study done in Georgia,[11] McClurkin proposes criteria for a good school system.

> A school system must be large enough to provide a full range of educational services and a qualified staff. This means 15,000 to 20,000 pupils in most systems, with a minimum of 10,000.
>
> Operations must be efficient and economical. This means control of all educational services by one local board of education.
>
> All school centers and the administrative headquarters must be accessible to the students they serve.
>
> Elementary School Centers--
>
> Minimum elementary schools provide at least one teacher per grade.
>
> Usually two first grade sections are needed to provide sufficient enrollment in Grade 7.
>
> Minimum enrollment should be about 240 pupils.

But--

> Desirable criteria would allow about three sections for each grade.
>
> Enrollments should be from 500 to 720 pupils.
>
> Travel time should not exceed 1 hour each way.

Secondary School Centers--

Minimum criteria for an adequate high school program require:

At least 100 students in Grade 12.

At least 3 teachers for each grade.

At least 3 times as many units offered as required for graduation.

Research shows a definite relationship between school size and earmarks of quality, as measured by

- Efficiency in operations
- Low Cost per pupil
- Teacher qualifications
- Teacher Assignments in major fields
- Number of subjects and courses offered
- Special services and enriched programs
- Technical specialization of employees
- Scholastic achievement of pupils
- Counseling and library programs
- Percentage of graduates entering college.

Larger schools give children a broader, richer, higher quality educational opportunity at lower cost per pupil.

McLure[24] proposed criteria for an adequate district.

1. The clientele should include pre-school age, elementary and secondary age youth, and a substantial portion of the adult population.
2. The program should have adequate breadth and depth of quality to accomplish the educational needs of all students to be served.
3. The schools should have adequate supportive services such as guidance and counseling, research and development services, psychological services, administrative and supervisory service, and auxiliary services such as transportation and food service.
4. Staff utilization should permit the assignment of teachers and other persons to their special fields of preparation.
5. The school population should be of adequate size to permit the organization of pupils, personnel, and facilities in various groupings of greatest educational effectiveness and economy.
6. A district should be governed by a board of education consisting of lay citizens elected on a non-partisan basis, and subject to policies expressed in state law.

To meet all of these conditions most satisfactorily a district would need about 25 to 30 thousand students. Some limitations would be found if a district has as many as ten thousand pupils, a figure which leading educators have claimed for many years as a minimum number for reasonable adequacy. To set a goal of ten thousand pupils

as a minimum size would undoubtedly appear unrealistic to most citizens. One of the most important problems in education is the need for citizens and professional leaders to think through the facts and issues of organizational characteristics of school systems. (pp. 168, 169)

Additional pertinent comments of the McLure recommendations to the people of Illinois may be found in the Appendix, page 26.

On occasion the sparsity of population, inaccessible terrain and the like may make sub-standard operations necessary in an attendance center. Somewhere diminishing returns must be recognized between the time students must travel to reach the school and a minimum, acceptable student population. Something approaching an arbitrary one hour limit each way on the school bus has been used by many as a maximum distance. If the district should find it necessary to operate a small school, adequate provisions should be made to over-compensate the instructional program through the provision of outside assistance. This aid would take the form of hardware and software necessary for a strong instructional program. It would further take the form of well trained staff members within the small school itself, supported from without with supervisory and consultative services. Examples of such assistance might include some or all of the following:

(1) Visiting master teachers who could work directly with the teacher and/or the students themselves on a regular schedule as is commonly the case with art, music and physical education. It also should include at least on-call assistance from mathematics, science, foreign language, language arts and other experts who could work in the same fashion with the teachers and students.

(2) Electronic instruction should be utilized whenever and however possible. The materials resource center in the building could be tied to the central information retrieval center. The computer used by the district should provide many services to the staff of the small building thus reducing the amount of routine, clerical time demanded of the teacher as well as broadening and expanding the depth of the curriculum. Telephone teaching could be utilized, thus linking classes with outside experts or individual, isolated students with the class. The use of television, both ITV and local, closed circuit is a must in this kind of situation.

(3) A generous supply of the standard audio visual items should be provided. Such equipment would include record players, tape recorders, film strip machines, sixteen millimeter projectors and overhead projectors.

(4) A variety of teaching machines of varying complexity should also be provided for individual student use.

(5) A strong emphasis upon individualized instruction should be a must in this attendance center of limited enrollment. Expertise and considerable preplanning on the part of the instructor are needed to produce the desired results.

One consistent weakness of most small districts is the inability to offer a reasonable selection of courses. As a result, therefore, the curriculum is limited to those absolutely necessary for college admission and very little else. Such a circumscribed curriculum does little to meet the needs of all the students and in fact forces them into a single mold - or out of school as a dropout. Ford, Hite and

Koch[14] in a recent study discuss this problem.

> A major conclusion of this report is that the small, remote high schools studied do not take advantage of their small size. Frequent contacts among teachers, students and parents, are not utilized to offer imaginative programs for the education of rural youth. Rather than taking advantage of the potential that exists here, the small high schools appear to be imitating traditional patterns of program organization and staff utilization. Such program organization and staff utilization were discarded by the fine large high schools decades ago.
>
> It is our conclusion the educational advantages found in the remote high schools studies are presently outweighed by disadvantages. The disadvantages arise from outdated and inadequate curricula and methodology and from activities and facilities which are too limited.(p.35)

Maximum Limits for an Acceptable Curriculum

For purposes of curriculum development, maximums are probably of less urgency than minimums. The large unit can be expected to have specialized talent somewhere on the staff. One perennial problem with large districts, however, is that of adequate communication to all members. It becomes increasingly difficult to insure the involvement, understanding and support of all the staff as the numbers increase. Many of the large city school districts have recently moved toward decentralizing into administrative units of approximately twenty-five thousand students. This move seems to be undertaken primarily for administrative convenience rather than an effort to improve the curriculum.

No matter the size, it is very important for the district to recognize the need for an individual approach to the curriculum. For example, an innovation which has excited one school is not always necessary in all the other schools. The central curriculum staff may endorse and even encourage proliferation of the new program, but this should only take place when the individuals within the target building understand, support and are capable of establishing the innovation. At the same time adequate curriculum leadership from the central office will make possible a curricular scope and sequence which provides the best series of instructional experiences the district is capable of mounting. The small understaffed district cannot provide this important function and often relies upon disinterested, outside influences such as the textbook publisher or a persuasive salesman.

It would appear likely that as districts continue to grow past the thirty thousand pupil figure the need for assistance from area resources should gradually diminish. There probably should develop a compatible, supplemental thrust on the part of the area unit which would reinforce, but not merely duplicate, the large district effort. McClure[4] states:

> It has been impossible to interpret quality as related to both size of school and per pupil expenditures. The two factors have diametrically opposed effects. Very small schools are notably high in unit costs, and so are the best high schools. Increasing school size tends to lower unit costs, primarily through increased efficiency in professional staff utilization, and simultaneously to raise the unit cost, primarily through better qualified personnel and greater breadth and depth of opportunities. (p. 74)

There is considerable support for continuing to retain as much local control of the educational process as possible in this highly centralized society of today. From a realistic standpoint, however, indications point to the contrary. Through the impotency of, or by default at the local level, controls continue to move further from the individual student. While some centralization of effort assists in curriculum development, indifference, disinterest and mistrust of the large, impersonal organization can do much to inhibit efforts of the staff.

In summary, there seems little justification for continuing the very small school or district unless the small unit is required because of geography or some other uncontrollable reason. If such be the case, extra supplies, materials and staff should be provided to compensate the instructional program. Small districts find it difficult to offer a balanced curriculum. It is probably of less importance to the curriculum if the district contains extremely large numbers of students. The large district faces a disproportionate number of problems with local control, individual involvement and general communication, due primarily to the size of the operation. The larger the district the less may be the need for the services available at the area level.

Personnel Necessary for Curriculum Development

The staff is actually the key to achieving a strong, well balanced curriculum. Staffing at the individual building level is the key to providing the strong grassroots base to the instructional program. The principal is the instructional leader for his building. Recently a new breed of instructional leaders has begun to occupy the principalship. These new principals are finding ways to delegate administrative detail in order to deal more effectively with problems of instruction, thus putting first things first.

As the content and emphases within the various disciplines continue to change rapidly, it becomes impossible for one individual to continue to be an expert in all the disciplines. In self defense the principal must become a generalist, attempting to understand in broad terms what is being advocated by the various disciplines. The secondary principal can turn to the department chairmen to provide him with the needed in-depth treatment of each subject. This role implies that the department head must have a strong background in both content and in method and must also have some scheduled time free from students to provide curriculum leadership within his discipline. There should be a vice principal for curriculum and instruction who will provide much of the coordination necessary in the process of curriculum development.

Building personnel will find much needed assistance from the central office staff. The elementary principal will employ the services of the central staff to an even greater extent because he does not have the administrative assistance in his building which the secondary principal enjoys.

Staffing of the central office is also quite important to the future of the curriculum. It is at this level that the coordination and overall leadership for the district must be concentrated. These people should be able to discern the "big picture", whereas individual building units are most concerned with smaller components of the total. The overall responsibility for the curriculum program of the district should be placed in the hands of one individual. He is called by a variety of titles including the director of instruction, curriculum director,

assistant superintendent for curriculum and/or instruction.

To support the curriculum efforts of this individual a staff of high quality specialists is needed. This group should be able to support, relate to, and keep in perspective, the entire scope of the curriculum from pre-school through the adult level. Under the leadership of the director of instruction a continuous effort toward providing a strongly balanced curriculum should be maintained. These staff members should be assigned full time to the task of curriculum and instruction and should not be expected to work with students. They must be able to put all their energies to the single endeavor rather than diluting themselves in interesting but less essential activities. The central curriculum staff should include specialists in each of the following areas:

Art
Audio visual
Business education
Data processing
Early childhood
English-language arts
Evaluation and research
Exceptional children
(both talented and retarded)
Federal relations
Home economics - family relations
Industrial arts
Languages
Library services
Mathematics
Music
Occupational-vocational
Physical education
Science
Social science

To summarize, it is within the scope of this group of experts that problems of curriculum and instruction will be dealt with. They will provide district leadership for curriculum development. They also will provide support and assistance on an individual building basis to staff members. They will be members of the district curriculum council. They will often serve as spokesmen for their subject area both within and without the district. They will be initiators and encouragers of educational research. They will constantly be attempting to keep their district in a positive-type educational ferment.

Relationship of Other Services to Curriculum Development

A variety of supporting services must be maintained to enable the instructional program to function satisfactorily and efficiently within the established curriculum. These services are provided to support the instructional program, not to dictate to it.

The services generally housed under the label of pupil personnel services, play an important support role in the instructional program and include the following: attendance, guidance and counseling, health services (dental, medical, nursing), psychological, social workers - home visitors and speech therapists. Continued progress through automation and technological adaptation should improve their efficiency in the future.

The central research office is rapidly achieving new importance in curriculum development. As the instructional program becomes more sophisticated, and as greater attention is given to the research area, the function will take on added significance. Large scale curriculum development will be properly designed to ensure adequate evaluation. The learning process itself will be strengthened through the efforts of competently developed research.

Historically educational research has been considered as something done within the ivory towers of some far-off university and having no direct bearing upon the "real world" of the public school classroom. Recently this concept has been recognized for what it was and a more realistic approach has been developing. Leaders in industry have long recognized the importance of research and have provided generously for it. Education is making some belated movement to also provide such a commitment. To the extent that funding can be provided, the resulting research findings will modify and improve various aspects of the curriculum and of the teaching act itself.

As the local district develops curriculum experiments, it must adequately provide a basic research procedure. There must be a stated, identifiable purpose, a clear design and a well thought through method of implementation. Adequate means of evaluation must be incorporated from the start to eventually substantiate any gains made by the project. A climate of change must be developed within the district to ensure a successful operation. With this climate for change it becomes increasingly possible to identify and relate to improved instructional methods and materials. When the staff finds it possible to ask the important questions of itself without feeling a personal threat, rapid, solid progress can take place.

Industry has recently developed a great interest in the educational market and has been providing research and development efforts of its own. As a result many new items of hardware and software are presently being made available. The curriculum director and his staff will be increasingly encouraged to accept these materials for use within the individual district. Indiscriminate and injudicious adoption of whatever is available will not necessarily improve an individual instructional program and may in fact weaken the total curriculum for the district. Careful analysis of the available materials coupled with some research of the possible ways of using them should be of primary importance to the curriculum effort.

Much of the instructional material now available and being promised to education can greatly contribute to a stronger instructional program. In most instances, however, these improvements will not take place without a significant, additional cost factor. As more attention is given to individualized instruction, for example, the instructional costs go up rapidly. The world of tomorrow demands a better product than that turned out today. The capability to provide that better product is present. The means of underwriting such a program must be located.

The data processing capability of the district will be a very significant part of the curriculum team. Through its capabilities much larger innovations, experiments and curriculum study can take place more effectively and more efficiently. Rapid feedback of important information will assist the curriculum developer to identify those practices which are significantly important to continue and which need modification and revision. In the past this service has largely been used for the routine business operations and for some scheduling and printing of items such as grade reports. As the district understands the potential impact available to the instructional program itself, great forward strides will occur in the curriculum.

One very great concern of curriculum directors is the problem involved in communication. More unsuccessful curriculum development can probably be blamed on poor communications than any other one item. It is important that all interested parties, professional, lay adults and the students themselves have a general picture of what is being attempted. In the day when professional negotiation is becoming the accepted practice and when the teaching group is flexing its collective muscle, communications take on an even more important role. Many districts have

found the curriculum council an acceptable mechanism to keep those working at the building level and at the central office level in communication. Various lay advisory committees can greatly assist, not only in developing a new program, but also in interpreting it to the others in the community. More and more it is becoming important for the district to have satisfactory communications with the state and the federal agencies.

In addition, the curriculum worker must be prepared to work with outside groups and agencies, both public and private. If this is not successfully accomplished, the process of curriculum development is not complete, and the results will be weakened accordingly. Some examples of the groups and forces which will be influential include the following:

The U. S. Office of Education and the various subunits contained therein increasingly provide a stronger impact upon the local curriculum.

State departments of education have received additional funds and have begun to provide more leadership than in the past.

Private foundations continue to influence some parts of the curriculum through judicious application and withdrawing of grant money.

Business and industry is being encouraged to assist educational endeavors through special grants.

Universities through the implementation of the various aspects of good teaching, creative research and meaningful service to education are continuing to affect the instructional program at the local school level.

Special interest groups, espousing their particular biases and coveting unique programs, are always present and must not be ignored, while not necessarily always being followed. Such groups might include anything from the local Chamber of Commerce, the American Medical Association, the American Legion, the PTA or AFL-CIO to a local garden club, bridge club or newly formed citizens group attempting to make some definite change in the school program.

The curriculum specialist cannot ignore these pressure groups. It becomes vital to the success of his program, however, that he work with, through and sometimes around them to achieve his goals. As a coordinating influence he can perform the role of a catalyst to pull together the work of these groups in a positive fashion.

In summary, the curriculum development process must include recognition of the importance of other related groups, agencies and individuals to effectively develop the best curriculum for the district. The supporting services of pupil personnel, research and data processing can assist the instructional program if properly utilized. Communications must be kept open and operate freely at all levels within the professional structure and also with the students, their parents, and various groups and agencies outside the school district. More influence upon the curriculum is being exerted from outside - the U. S. Office of Education, the state education agency, foundations, industry, the university and by pressure groups. All can play a very definite role, pro and con, in the development of a satisfactory curriculum and the accompanying instructional program. It becomes the responsibility of the curriculum worker to utilize and coordinate the potential strengths of these varied forces to further the best curriculum development.

Educational research is increasing both in magnitude and in quality. The local district must have properly trained researchers with the time and resources necessary to attack these problems of curriculum and instruction. A careful examination and selection of instructional supplies and equipment now available will improve the instruction capabilities of the district. The above mentioned

services, pupil personnel, research and data processing, represent examples of necessary support for the curriculum. To the extent that these offices fulfill their proper role in the district operation, the instructional program will be greatly strengthened. With weak, inadequate, or a complete lack of these services, it is very unlikely that the curriculum development process will be successful or will have a very great impact upon the instructional program.

Conclusion

The preceding remarks have attempted to place in some perspective the necessary relationships between school district organization and the curriculum in today's society. Part I describes some of the forces currently affecting the curriculum, plus some likely to continue to make an impact in the future. A need was described for a balanced curriculum capable of challenging the needs and interests of all students. As one looks to the future, the need becomes more evident for more teaching of concepts. Clearly defined and stated objectives must be present as the curriculum is implemented. Educational leaders should follow a realistic plan as the process of curriculum development unfolds. A broad inservice program should support the curriculum.

Part II describes some of the individuals and groups active in the curriculum development process, indicating the ingredients necessary to mount a solid program. Attention was addressed to the educational structure, proceeding from the local attendance unit to the federal government. Curriculum development usually ends and often begins at the building level. A strong district staff must be available to provide instructional leadership and classroom support in the various disciplines. An intermediate unit area is gaining popularity, providing leadership and various types of assistance at a level between the district and the state. More leadership and more financial support can be expected to emanate from the state in the future. A useful service might be provided through a multi-state cooperative arrangement. The Federal Government is playing an increasingly significant role in the local curriculum development process.

Next consideration was given to limitations and restrictions on desirable curriculum development. A minimum size school and/or district becomes quite important when dealing with curricular matters. Adequate financing is often impossible in smaller districts, thereby producing additional problems. A special staff of instructional specialists necessary to carry out the curriculum development process is identified. The accompanying supporting services are briefly described. Districts unable to adequately provide such support are probably too small to offer a satisfactory program. Recognition is given to the significance of various outside pressure groups to the process of curriculum development and also to the increased importance of research.

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APPENDIX

The following material represents a portion of the recommendations prepared by the recent Illinois Task Force on Education. They are included here as an example of carefully developed and reasonable proposals.

General Recommendations to Improve Educational Programs

The Elementary School

1. The state should establish experimental programs of early childhood education and supportive services, including related parent education, for pre-kindergarten age children. The programs should be under the jurisdiction of the Office of the Superintendent of Public Instruction (or a state board if created) and the local school districts. The programs should incorporate the experimental activities already established through federally financed programs. Steps should be taken with institutions of higher education for the training of teachers and sub-professional workers. Standards for certification of teachers and other workers should be assigned to the state certification board, based upon criteria established by the General Assembly.

2. The state should require all districts operating elementary schools to establish kindergartens, with compulsory attendance of all pupils before entering the first grade of the public schools. School districts should be required to provide free transportation for children in kindergarten as provided for other children.

3. The elementary school, public and private, has a unique responsibility for the general education of all children. To discharge this responsibility effectively the school must have the support of citizens and the capability to provide for all aspects of development of the child--intellectual, physical, social, and emotional.

4. There are many strengths and desirable features of the curricula in the elementary schools of Illinois. There are also many weaknesses which need correction in many cases, including: (1) improvement in general quality of schools and instructional programs; (2) some imbalances among emphasis on teaching and subject matter; (3) inadequate attention to children's physical, social, and emotional development; (4) some over-

crowded curricula; and (5) lack of sufficient unity in the total program in the wake of innovative developments.

5. Instructional materials and resources should be an integral part of the curriculum in the elementary school in such quantity and flexibility to make effective individualization of instruction possible. The concept of the library should be expanded to include all types of instructional materials rather than just the conventional materials. Every school should have a central library and, in addition, access to a materials center with a large store of special facilities.

6. Special attention should be given to improvement of instruction for development of basic skills and intellectual processes such as critical and logical thinking, conceptualizing, generalizing, inquiring, problem solving, and work-study skills for productive learning in different subject matter areas.

7. Every school should be actively engaged in continuous study and periodic revision as required to keep all aspects of the educational program and related services up to date.

8. The elementary school should be organized to combine the best elements found in the traditional self-contained classroom with such forms as non-graded, multi-age groups, team teaching, and modified departmentalization at the upper grade levels which staff members can utilize effectively to implement the instructional program.

9. Steps should be taken as soon as feasible to correct widespread deficiencies in buildings and other facilities in elementary schools which hamper, if no prevent altogether, the development of instructional programs of high quality.

Junior and Senior High School

10. The program of the junior high school should be planned to meet the burgeoning diversification of interests, aptitudes, and needs of youth. The curriculum should offer opportunity for introduction to all fields of knowledge and skills in such a way that students may be prepared to continue their development to the highest degree possible in high school.

11. The junior and senior high schools should be prepared to meet the needs of youth who have academic, cultural, motivational, and other handicaps which lead to dropout, unemployment, and lack of vocational competence. Work-study programs should be available for many of these youth.

12. The program of secondary education (junior and senior high school) should be comprehensive with the widest possible breadth to accommodate the diversity of interests, abilities, and needs of all youth. Adequate standards based on breadth of program should be established as one type of criterion for approving schools and new school districts.

Applicable to All Schools

13. Many schools have deficiencies in physical facilities and instructional materials which should be remedied through replacement and renovation

if these schools are to achieve the results expected of them. The most pervasive problem is found in numerous instances where buildings and equipment are obsolete, but structurally sound; where renovation for effective use would be uneconomical; and where complete replacement would appear to many citizens to be wasteful.

14. The improvement of education is directly related to the quality of the professional staff. Special consideration should be given to the following: (1) improving certification standards and pre-professional training; (2) developing programs of released time for further training; (3) increasing the numbers and kinds of special service personnel to reinforce the regular classroom teachers; (4) using sub-professional staff for non-teaching tasks; (5) providing more effective instructional leadership; and (6) giving more responsibility to the teacher to decide what are the best learning experiences for each child and what materials and teaching techniques are most appropriate.

15. Schools should be organized to provide three levels of instruction: the elementary school, the junior high school or the middle school, and the high school. The preferred combination of grades for the junior high throughout the country appears to be 7-8-9. Other combinations such as 6-7-8 and 7-8 are found less frequently and appear to be less favored. There is a growing interest and experimentation in grades 5-6-7-8 in some large urban areas. Such experiments should be encouraged and the results should be studied carefully for possible improvement in existing patterns.

16. School districts should offer, through the schools or other arrangements, educational programs for youth who have dropped out of school and for adults who need further education.

17. The supportive services such as guidance and counseling, health, and psychological services should be provided adequately in all schools and articulated with the elementary school, junior high school and high school.

18. To accomplish these ends policies should be established which lead to improvement in the professional and economic status of teachers and other professional workers in the schools. Specialization of talent must be recognized for the total staff and not just for a few programs that are singled out for earmarked aids and other special attention. Staffing adequacy requires the following: utilization of staff to teach in their field of specialization, proper number of staff in relation to number of pupils, high degree of competence, dedication to teaching, and adequate financial rewards for service.

19. The schools should be given adequate resources to acquire the necessary staff and facilities to adapt (innovate) to changing conditions. Programs of in-service education for large numbers of staff members should be instituted with leaves of absence on full pay for specific training. Such expense for professional training is no less an investment for educational change than the provision of essential materials and facilities.

20. The state should adopt appropriate policies to extend the present school year to include special summer programs. Pupil attendance should be

optional. Programs should be developed to meet the needs of pupils for remedial courses, enrichment, and acceleration.

Vocational and Adult Continuing Education

21. Occupational education should be broadly defined and given appropriate attention at each level of the entire educational program. Courses which have been classified as general education have occupational value, sometimes as much as those that are called vocational in nature. Courses in general art, for example, have value for commercial art and should be planned to take advantage of this fact.

22. Common skills in various occupations should be researched and the schools should organize instruction around broadly applicable skills and knowledge. Proliferation of specialized vocational courses should not be accepted. This practice can easily lead to such questionable examples as agricultural selling, industrial selling, retail selling, and institutional selling.

23. Each school system operating programs of secondary education should offer every boy and girl an opportunity for entry-level preparation in home and family living and in one or more broad occupational areas. Programs should be available to every student in the local district through cooperative arrangement of two or more districts, and through regional vocational centers in all of the following occupational areas: agricultural, business and commercial, distributive, industrial and service.

24. An individual should not be allowed to drop out of high school or an educational program of equivalent rank unless the person has attained a skill for entrance into an occupation. This requirement may be met in a work-study program of a regional vocational center or other recognized educational system.

25. Work-study programs meet the needs of some students more effectively than learning experiences operated entirely within the school. These programs are especially vital to meeting the needs of marginal youth and migratory workers. A variety of opportunities should be available through the regular day and part-time evening schools of the local school district, regional centers, and programs of non-public school agencies.

26. The school should place as much emphasis on counseling, preparing, and assisting students to find employment as is given to comparable activities for students seeking admission to an institution of higher education.

27. It is necessary for each school district to provide or to participate with other districts in providing training programs for adults who have dropped out of the labor market and later desire to return. Every school district should provide or arrange provision for a broad educational program to meet the interests, cultural and civic, and occupational aspirations of adults. These programs can continue to be largely self-supporting, but the school should provide administrative leadership for them. Also the district should arrange for tuition scholarships which would permit qualified adults to attend who are unable to pay tuition charges.

28. Each school district should assume responsibility for the collection of information about programs of adult education that may be available from voluntary groups in the community.

Innovations

29. One of the most serious deficiencies of the public school of Illinois that should be remedied is the limited extent to which they have established educational innovations. Innovation, as used here, refers to a deliberate and specific improvement on a scale which is substantial and extensive enough to help the school in accomplishing its aims and objectives. While change and adjustment have always been an inherent part of the educational process, it is obvious that not all minor and routine modifications rightfully can be called innovations.

30. Educational innovations do not just happen in the normal course of events. Rather, they are established within a school system when it becomes apparent that there are better ways of providing services related to the organizational, operational, and instructional programs. They require qualified personnel who are committed to seeking improvements, time to conduct careful study, planning, and evaluation. If an innovation is to prosper there must be many favorable conditions, such as the following: (1) a school with enough students and faculty to provide conditions conducive to adjustment, modification, and experimentation with programs, (2) sufficient financial support and backing to make the innovative process feasible and practicable without harming or depreciating other parts of the school program, and (3) assistance and support from other institutions and agencies concerned with education.

31. Many school districts in Illinois are not adequately organized or structured to obtain and utilize professional specialists to develop innovations. The reorganization of the administrative structure at state, regional, and local levels as proposed in the chapter on administrative structure would help overcome this problem.

32. The schools of the state should have the cooperation and assistance of such agencies and institutions as the following: research laboratories, campus schools, college and university faculties and facilities, state department of education programs and services, and others. Organized efforts should be made to provide greater cooperation among all agencies and institutions which can contribute in various ways to innovation in education.

33. There are certain areas in education where much effort should be concentrated immediately to introduce or to speed up innovative activity. This list is not complete; numerous ones are suggested throughout this report; but the following are crucial and deserve special attention:

    (1) Experimental programs for early childhood education;

    (2) Experimental programs to meet some of the most pressing problems of schools, particularly to more nearly equalize educational opportunity and to improve relations among rural-urban and ethnic groups;

    (3) Experimental programs of instruction such as television and programmed instruction;

    (4) Summer schools on a larger scale to concentrate on remedial programs, and opportunity for enrichment and acceleration;

(5) Vocational programs in high school to prepare students with entry-levels for employment as a requirement for permission to drop out of school;

(6) Work-study programs for marginal youth;

(7) Programs for part-time education of adults;

(8) Regional centers to provide for sharing of certain instructional programs, special services, and instructional materials among local districts. Also the centers should provide a staff of qualified specialists to concentrate on research and innovation for the local districts;

(9) Cooperative activities between public and non-public school educational agencies.

William P. McLure, Chairman, "Education for the Future of Illinois", The Task Force on Education, Springfield, Illinois: State of Illinois, December, 1966. pp. 193-199.